



Docket No.: 210354US0

COMMISSIONER FOR PATENTS
ALEXANDRIA, VIRGINIA 22313

RE: Application Serial No.: 09/892,577

Applicants: Shigefumi SAKAI, et al.

Filing Date: June 28, 2001

For: SKIN COSMETIC COMPOSITION

Group Art Unit: 1617

Examiner: YU, GINA

SIR:

Attached hereto for filing are the following papers:

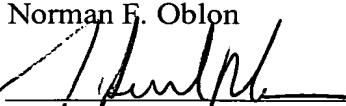
Appeal Brief w/attachment

Our credit card payment form in the amount of **-\$500.00-** is attached covering any required fees. In the event any variance exists between the amount enclosed and the Patent Office charges for filing the above-noted documents, including any fees required under 37 C.F.R. 1.136 for any necessary Extension of Time to make the filing of the attached documents timely, please charge or credit the difference to our Deposit Account No. 15-0030. Further, if these papers are not considered timely filed, then a petition is hereby made under 37 C.F.R. 1.136 for the necessary extension of time. A duplicate copy of this sheet is enclosed.

Respectfully submitted,

OBLON, SPIVAK, McCLELLAND,
MAIER & NEUSTADT, P.C.

Norman E. Oblon



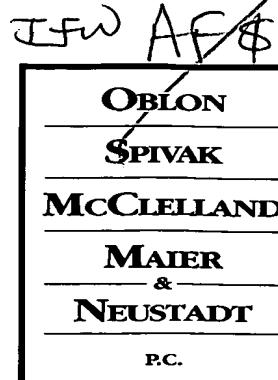
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DOCKET NO: 210354US0

IN THE UNITED STATES PATENT & TRADEMARK OFFICE

IN RE APPLICATION OF :

SHIGEFUMI SAKAI, ET AL. : EXAMINER: YU, GINA

SERIAL NO: 09/892,577 :

FILED: JUNE 28, 2001 : GROUP ART UNIT: 1617

FOR: SKIN COSMETIC COMPOSITION :

APPEAL BRIEF

BOARD OF PATENT APPEALS AND INTERFERENCES
ALEXANDRIA, VIRGINIA 22313

SIR:

This is an appeal of Claims 33-49 and 51, which were finally rejected in the Official Action dated December 13, 2005. A Notice of Appeal was timely filed on March 13, 2006.

I. REAL PARTY IN INTEREST

The real party in interest in this appeal is Kao Corporation, having an address 14-10, 1-chome, Kayaba-cho, Nihonbashi, Chuo-ku, Tokyo, Japan.

II. RELATED APPEALS AND INTERFERENCES

Appellants, Appellants' legal representative and the assignee are aware of the following appeals in US Patent applications owned by assignee. These appeals may, or may not, directly affect or be directly affected by or have a bearing on the Board's decision in this appeal, and are provided for the Board's information:

05/10/2006 JADD01 00000044 09892577
of FC:1402 500.00 OP

<u>U.S. Application Serial No</u>	<u>Attorney Docket Number</u>
09/868,040	209313US-6613-327-3-PCT
10/083,387	219028US-1412-327-0-CONT
10/131,188	222502US-1412-327-0
10/297,582	231291US-1412-327-0-PCT
10/418,112	236709US-1412-327-0
10/488,251	250152US-1412-327-0-PCT
10/810,611	251067US-1412-327-0-CONT

III. STATUS OF THE CLAIMS

Claims 33-49 and 51, all the claims in the application, stand rejected and are herein appealed.

IV. STATUS OF THE AMENDMENTS

No amendment has been filed since the Official Action dated December 13, 2005.

V. SUMMARY OF THE CLAIMED SUBJECT MATTER

The present invention provides a skin cosmetic composition comprising hydrogel particles dispersed in an aqueous medium. The hydrogel particles comprise a non-crosslinked hydrogel (Spec. at page 5, line 21-page 7, line 14) having an oil component dispersed therein (Spec at page 5, lines 4-5 and page 7, line 15-page 9, line 13). The aqueous medium has a viscosity of 300 to 5000mPa•s at 25° C (Spec at page 19, lines 5-8) and a specific gravity of 0.7 to 2.0 (Spec at page 19, lines 12-14). In the present invention, the hydrogel particles are prepared by a process comprising providing an emulsion or dispersion of components comprising a non-crosslinked hydrogel-forming polymer, the oil component

and water; and discharging the emulsion or dispersion through an orifice into a cooling oil under conditions sufficient to provide droplets, which are cooled in the cooling oil after formation (Spec at page 15, line 6-page 17, line 14 and Examples II-1 to II-10 on page 34). This method provides hydrogel particles which are substantially uniform in their size and shape, as discharging the emulsion or dispersion through an orifice under conditions sufficient to form droplets would inherently do. It is important that the present particles be formed as droplets in order to provide the uniformity of appearance and shape inherent in such formation.

Further, as noted above, the invention requires that the aqueous medium have a viscosity of 300 to 5000mPa•s at 25° C and a specific gravity of 0.7 to 2.0. Applicants have found that this provides significantly improved flowability to the cosmetic composition, and provides refreshing feel, particularly as a lotion. This is further described in the specification at page 19, lines 12-18.

An important aspect of the present invention is this control of the aqueous medium to the desired viscosity and specific gravity. As shown in the attached picture, the composition of the present invention has the hydrogel particles appearing to be suspended in the aqueous medium (as reflected in dependent claim 51 which requires the hydrogel particles to be stably dispersed and suspended) See also Specification at page 18, lines 16-18, which note that “the aqueous medium (B) is not limited to specified ones, as long as the hydrogel particle (A) can be stably and homogeneously dispersed therein, without precipitating or floating.” This can only be achieved by control of the viscosity and specific gravity of the aqueous medium, for a given hydrogel particle. By selection of these properties of the aqueous medium, this provides a final skin cosmetic composition that is not only pleasing to the touch, but is also visually aesthetically pleasing, with the particles most preferably suspended in a transparent

medium, giving the appearance that the particles are floating stationary in the medium in the container (see attached picture of an exemplary product of the present invention).

VI. GROUNDS OF REJECTION

1. Claims 33-43, 46-49 and 51 stand rejected under 35 U.S.C. 102(b) as anticipated by Delrieu et al (US 5,961,990; hereafter “Delrieu”), in view of Noda et al (US 5,089,269; hereafter “Noda”), and Rosentreich et al (US 3,932,609; hereafter “Rosentreich”).
2. Claims 44 and 45 are rejected under 35 U.S.C. 103(a) as obvious over Delrieu, Noda and Rosentreich, and further in view of Tsaur et al (US 5,726,138; hereafter “Tsaur”).

VII. ARGUMENT

Claims 33-43, 46-49 and 51 stand rejected under 35 U.S.C. 102(b) as anticipated by Delrieu, in view of Noda and Rosentreich. First and foremost, this rejection is unsustainable as it requires the combination of three separate references in order to provide a rejection for anticipation. The Examiner has admitted in the Office Action dated December 13, 2005, in the third and fourth lines from the bottom of page 4, that “Delrieu fails to teach the viscosity and the specific gravity of the aqueous medium of the composition.” If this is an anticipation rejection predicated on Delrieu, then the rejection must fail by the Examiner’s own admission. For anticipation within the meaning of 35 U.S.C. 102(b), there must be no difference between the invention as defined by the claim in question and the prior art reference, as viewed by a person of ordinary skill in the field of the invention.¹ Anticipation thus requires that all elements of the claimed invention must be found within a single

¹ See *Scripps Clinic & Research Found. v. Genentech, Inc.*, 927 F.2d 1565, 1576 (Fed. Cir. 1991).

reference, either explicitly or inherently.² The Examiner has admitted that Delrieu et al do not disclose all elements of the invention, and in fact has had to refer to Noda and Rosentreich to attempt to provide those missing elements. The Examiner has made no attempt to argue that the viscosity and specific gravity of the aqueous medium of the claimed composition are inherent within Delrieu (and rightly so, since Delrieu contains nothing that would suggest such to be the case). Accordingly, the rejection for anticipation is improper and cannot stand.

Claim 33, 37-43, and 46-49

Even if the Examiner asserts that this rejection should clearly be considered as a rejection under 35 U.S.C. 103 for obviousness based upon the combination of references, Appellants assert that there is nothing within the references to motivate one of ordinary skill to reach into Noda or Rosentreich to arrive at a viscosity and specific gravity combination as required for the aqueous medium of the present invention, and use that in the composition of Delrieu to arrive at the present invention composition.

Delrieu et al disclose preparation of a composition by injection of an agar composition through a needle into liquid paraffin oil at 5°C, with the resulting beads being incorporated into cosmetic compositions such as creams, gels or lotions. However, as admitted by the Examiner, there is nothing within Delrieu to suggest that the aqueous medium should have the required viscosity or specific gravity of the present claims, as now amended.

Noda discloses cosmetic compositions containing fine soft microcapsules made of a gelatin film swollen with water **and enclosing a hydrophobic component** (see abstract).

² See *Union Carbide Chemicals & Plastics Technology Corp. v. Shell Oil Co.*, 308 F.3d 1167, 64 U.S.P.Q.2d 1545 (Fed. Cir. 2002) which states: "In order to succeed on its anticipation defense, [an accused infringer] was required to prove by clear and convincing evidence that every limitation of [a patent owner's] asserted claims was contained, either expressly or inherently, in a single prior art reference."

The Examiner refers to Appellants specification at page 5, line 21-page 6, line 1 as showing that such microcapsules are included within Appellants definition of a non-crosslinked hydrogel. However, the Examiner has neglected Appellants specification at page 6, lines 17-22, which specifically states:

“The term ‘hydrogel particle’ as referred to herein means an approximately spherical particle made of a hydrogel, and ***does not include a so-called capsule composed of a shell and a core material.*** One of the great features of the hydrogel particle of the present invention resides in that the non-crosslinked hydrogel forms a continuous phase, and an oil component is contained therein as a dispersion phase.” (emphasis added)

Accordingly, the microcapsule of Noda is explicitly excluded from the present invention. Accordingly, whatever the viscosity of the Noda composition, one of ordinary skill in the art would not be motivated to modify the composition of Delrieu to provide the aqueous portion of the composition with a viscosity according to the present invention. Contrary to the Examiner’s statement at the bottom of page 5 of the Official Action of December 13, 2005, Noda does not disclose the use of agar beads (such as the preferred embodiment agar particles of the present invention), since Noda requires that their particles be **microcapsules**, which are specifically excluded from the definition of hydrogel particles by the present specification.

There is nothing within either reference suggesting the balancing of the viscosity and specific gravity of the aqueous medium and the hydrogel particles in order to provide a composition according to the present invention. One of ordinary skill in the art would not look to Noda to modify the Delrieu composition viscosity, since the Noda composition particles are actually microcapsules and any viscosity requirements in Noda would not necessarily translate to use in the compositions of Delrieu. Further, Noda says nothing about specific gravity of the aqueous medium. Despite the Examiner’s statement that “optimizing” the specific gravity would be routine experimentation, the Examiner’s statement contains an assumption that the specific gravity range is somehow merely an optimization of Delrieu’s

composition. However, there is nothing within either reference to suggest why one of ordinary skill would be ‘optimizing’ the viscosity or specific gravity and what goal they would be trying to achieve in doing so. Without that teaching, there is nothing in the references to suggest the combination in order to arrive at the present invention.

Rosentreich teaches liquid antiperspirant compositions. However, Rosentreich says nothing whatsoever about containing hydrogel particles, or any kind of suspended particles even similar to those of the present invention. Thus, even though Rosentreich teaches that their antiperspirant composition has a lotion formulation with viscosity of 500-2225 cps at ambient temperature, with a specific gravity of 1.100-1.400, their composition bears absolutely no relation to the presently claimed invention, as it contains no hydrogel particles of the type required by the present invention. Accordingly, one of ordinary skill in the art would have no reason to look to Rosentreich to select a viscosity and specific gravity for the aqueous medium of Delrieu (or Noda for that matter), in order to arrive at a composition of the present invention. This is another example of hindsight reconstruction of the present invention by the Examiner. The Examiner appears to have merely searched for any cosmetic type of formulation having a viscosity and/or specific gravity range that overlapped with the present invention, regardless of whether the type of composition was similar or not. What the Examiner appears to neglect is that the composition of the present invention requires the selection of these viscosity and specific gravity parameters in combination with the hydrogel particles. Further, as noted by Rosentreich at the top of column 4, the viscosity and specific gravity parameters are dependent on the components making up the composition, and thus translating from one type of composition to another (as from the composition of Rosentreich requiring a specific combination of quaternary ammonium salt and fumed silica to the present invention requiring an aqueous medium containing therein hydrogel particles that are preferably stably dispersed and suspended) is not readily done. In order to combine the

references as being done by the Examiner, there must be some teaching or motivation provided within the references themselves to use the teachings of one reference to modify the other.³ That is not present in the current case.

The Examiner appears to take the position that if any element of the invention is taught in any area of the cosmetic arts, regardless of the type of cosmetic composition in the reference, that element would be obvious to combine with any other reference in the cosmetic arts. That clearly cannot be the case, and is not the prevailing standard under U.S. patent law.

Claims 34-36

Additionally, claims 34-36 of the present application relate to the application of vibrations during the discharging step. Claim 35 specifies that the vibrations must be either applied directly to the dispersion or emulsion, directly to the orifice, or directly to the liquid column being discharged from the orifice. The Examiner notes that Delrieu “teaches to control the size of the beads by agitation of the oil bath”. However, this agitation simply means stirring of the oil bath, as one of ordinary skill in the art would recognize as the meaning of the term “agitation” in this particular usage. Further, there is absolutely nothing within Delrieu that would suggest using vibration applied directly to either the orifice, the dispersion or emulsion itself, or the liquid column being discharged from the orifice, in order to control shape and/or uniformity of the particles, thus rendering the particles more uniformly nearly spherical. It is clear that the Examiner is using impermissible hindsight in

³ See *In re Lee*, 277 F.3d 1338, 61 U.S.P.Q.2d 1430 (Fed. Cir. 2002) citing *In re Fritch*, 972 F.2d 1260, 1265, 23 U.S.P.Q.2d 1780, 1783 (Fe. Cir. 1992) stating “the examiner can satisfy the burden of showing obviousness of the combination ‘only by showing some objective teaching in the prior art or that knowledge generally available to one of ordinary skill in the art would lead that individual to combine the relevant teachings of the references.’”; see also *Teleflex, Inc. v. Ficosa North American Corp.*, 299 F.3d 1313, 63 U.S.P.Q.2d 1374 (Fed. Cir. 2002) citing *In re Dembiczak*, 175 F.3d 994, 999, 50 U.S.P.Q.2d 1614, 1617 (Fed. Cir. 1999) stating: “The showing of a motivation to combine must be clear and particular, and it must be supported by actual evidence.”

attempting to force the “agitation of the oil bath” as disclosed in Delrieu to somehow meet the requirement of the present invention that vibration be applied during the discharging step, particularly when it is applied directly to the (i) orifice, (ii) the dispersion or emulsion itself, or (iii) to the liquid column being discharged from the orifice.

Claim 51

The Examiner has stated that Noda teaches adjustment of the specific gravity for “improved dispersibility” at column 3, lines 40-45, which state: “...For example, Japanese Unexamined Patent Publication (KOKAI) No. 61-112897 discloses a surfactant solution containing capsules having an improved dispersibility provided by an adjustment of the specific gravity.” However, the Examiner is confusing the effect of “improved dispersibility” with providing a “stably dispersed and suspended” particle in an aqueous medium (as required in claim 51). The Examiner must realize that “improved dispersibility” means easier to cause to be dispersed, but does not necessarily result in being “stably dispersed”. In fact, in many dispersions, while the dispersed phase can be readily dispersed, the dispersed phase also readily settles back out of dispersion. Thus “improved dispersibility” merely refers to ease of making into a dispersion, NOT to providing a composition that has particles that are **stably dispersed** within it. As such, this part of Noda cannot suggest the present invention, particularly with respect to claim 51.

Accordingly, the references used by the Examiner cannot be combined to render the present invention obvious, and the rejection should be REVERSED.

Claims 44 and 45

Claims 44 and 45 are rejected under 35 U.S.C. 103(a) over Delrieu, Noda and Rosentreich, and further in view of Tsaur et al (US 5,726,138; hereafter “Tsaur”). Delrieu,

Noda and Rosentreich have been discussed above. Claims 44 and 45 depend from claim 33 and specify that the oil component comprises a solid fat having a melting point of not less than 35° C (claim 44) and further that the oil component is a solid ceramide or an analog thereof (claim 45). While it is true that Tsaur discloses solid ceramide as an oil component in the particulates used therein, Tsaur still does not overcome the deficiencies of the combination of Delrieu, Noda and Rosentreich as listed above. Namely, the combination of references is (1) improper in the absence of some teaching or suggestion in the references to combine their teachings and (2) deficient in not providing a composition having the required viscosity and specific gravity requirements of the present invention, particularly in combination with the use of a hydrogel particle comprised of a non-crosslinked hydrogel and an oil component, but not being a capsule or microcapsule type construction. As such, the combination of references cannot render the present invention obvious and the rejection should be REVERSED.

VIII. CONCLUSION

For the above reasons, it is respectfully requested that all the rejections still pending in the Final Office Action be REVERSED.

Respectfully submitted,

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APPENDIX

CLAIMS ON APPEAL

33. A skin cosmetic composition comprising:

hydrogel particles dispersed in an aqueous medium, wherein each of said hydrogel particles comprises a non-crosslinked hydrogel having an oil component dispersed therein, and wherein said aqueous medium has a viscosity of 300 to 5000mPa•s at 25° C and a specific gravity of 0.7 to 2.0, wherein said hydrogel particles are prepared by a process comprising:

providing an emulsion or dispersion of components comprising a non-crosslinked hydrogel-forming polymer, the oil component and water; and

discharging said emulsion or dispersion through an orifice into a cooling oil under conditions sufficient to provide droplets, which are cooled in said cooling oil after formation.

34. The skin cosmetic composition of claim 33, wherein said discharging step is performed simultaneously with application of vibrations.

35. The skin cosmetic composition of claim 34, wherein said application of vibrations is performed by a member selected from the group consisting of applying vibration to said orifice, applying vibration directly to said emulsion or dispersion, and applying vibration to a liquid column discharged from said orifice.

36. The skin cosmetic composition of claim 34, wherein said vibrations are at a frequency of from 1 to 2000 Hz.

37. The skin cosmetic composition of claim 33, wherein said orifice has a diameter of from 0.1 to 5 mm.

38. The skin cosmetic composition of claim 33, wherein said emulsion or dispersion is at a temperature above the gelation temperature prior to discharging through said orifice and is cooled to below said gelation temperature thereafter.

39. The skin cosmetic composition of claim 33, wherein said droplets have a shape having rotation symmetry.

40. The skin cosmetic composition of claim 39, wherein said droplets are spherical.

41. The skin cosmetic composition of claim 33, wherein said emulsion or dispersion further comprises an emulsifying agent or a dispersing agent.

42. The skin cosmetic composition of claim 33, wherein the non-crosslinked hydrogel is made of agar or gelatin.

43. The skin cosmetic composition of claim 41, wherein the emulsifying agent or dispersing agent comprises a polymer emulsifying or dispersing agent.

44. The skin cosmetic composition of claim 33, wherein the oil component comprises a solid fat, and the melting point of the oil component is not less than 35° C.

45. The skin cosmetic composition of claim 33, wherein the oil component comprises a solid ceramide or an analog thereof.

46. The skin cosmetic composition of claim 33, wherein not less than 80% by weight of the hydrogel particles have a ratio of a longest diameter to a shortest diameter (longest diameter/shortest diameter) of not more than 1.7.

47. The skin cosmetic composition of claim 33, wherein the hydrogel particle has a breaking intensity of 2 to 40kPa and a Young's modulus of 10 to 150 kPa.

48. The skin cosmetic composition of claim 33, wherein the non-crosslinked hydrogel is made of agar having a gel strength of not more than 68.6 kPa.

49. The skin cosmetic composition of claim 33, wherein the skin cosmetic composition is a lotion.

51. The skin cosmetic composition of claim 33, wherein the hydrogel particles are stably dispersed and suspended in said aqueous medium.

EVIDENCE APPENDIX

Attached picture showing composition of the present invention with hydrogel beads stably dispersed and suspended in the medium.

RELATED PROCEEDINGS APPENDIX

None.